<110> DESNOYERS, LUC
      FILVAROFF, ELLEN

<120> Methods and Compositions for Modulating and Detecting
      WISP Activitiy

<130> P1918R1

<140> US 10/519,621
<141> 2004-12-28

<150> US 60/392,652
<151> 2002-06-29

<150> US 60/408,739
<151> 2002-09-06

<160> 20

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<213> Homo sapiens

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Ala Ala Ser Thr Val Leu Ala Thr Ala Leu Ser Pro Ala Pro Thr
                 20   25   30

Thr Met Asp Phe Thr Pro Ala Pro Leu Glu Asp Thr Ser Ser Arg
                 35   40   45

Pro Gln Phe Cys Lys Trp Pro Cys Glu Cys Pro Pro Ser Pro Pro
                 50   55   60

Arg Cys Pro Leu Gly Val Ser Leu Ile Thr Asp Gly Cys Glu Cys
                 65   70   75

Cys Lys Met Cys Ala Gln Gln Leu Gly Asp Asn Cys Thr Glu Ala
                 80   85   90

Ala Ile Cys Asp Pro His Arg Gly Leu Tyr Cys Asp Tyr Ser Gly
                 95   100   105

Asp Arg Pro Arg Tyr Ala Ile Gly Val Cys Ala Gln Val Val Gly
                 110   115   120

Val Gly Cys Val Leu Asp Gly Val Arg Tyr Asn Asn Gly Gln Ser
                 125   130   135

Phe Gln Pro Asn Cys Lys Tyr Asn Cys Thr Cys Ile Asp Gly Ala
                 140   145   150

Val Gly Cys Thr Pro Leu Cys Leu Arg Val Arg Pro Pro Arg Leu
                 155   160   165

Trp Cys Pro His Pro Arg Arg Val Ser Ile Pro Gly His Cys Cys
                 170   175   180

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Glu Gln Trp Val Cys Glu Asp Asp Ala Lys Arg Pro Arg Lys Thr
              185                 190                 195

Ala Pro Arg Asp Thr Gly Ala Phe Asp Ala Val Gly Glu Val Glu
              200                 205                 210

Ala Trp His Arg Asn Cys Ile Ala Tyr Thr Ser Pro Trp Ser Pro
              215                 220                 225

Cys Ser Thr Ser Cys Gly Leu Gly Val Ser Thr Arg Ile Ser Asn
              230                 235                 240

Val Asn Ala Gln Cys Trp Pro Glu Gln Glu Ser Arg Leu Cys Asn
              245                 250                 255

Leu Arg Pro Cys Asp Val Asp Ile His Thr Leu Ile Lys Ala Gly
              260                 265                 270

Lys Lys Cys Leu Ala Val Tyr Gln Pro Glu Ala Ser Met Asn Phe
              275                 280                 285

Thr Leu Ala Gly Cys Ile Ser Thr Arg Ser Tyr Gln Pro Lys Tyr
              290                 295                 300

Cys Gly Val Cys Met Asp Asn Arg Cys Cys Ile Pro Tyr Lys Ser
              305                 310                 315

Lys Thr Ile Asp Val Ser Phe Gln Cys Pro Asp Gly Leu Gly Phe
              320                 325                 330

Ser Arg Gln Val Leu Trp Ile Asn Ala Cys Phe Cys Asn Leu Ser
              335                 340                 345

Cys Arg Asn Pro Asn Asp Ile Phe Ala Asp Leu Glu Ser Tyr Pro
              350                 355                 360

Asp Phe Ser Glu Ile Ala Asn
              365

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<212> DNA
<213> Homo sapiens

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 ctgccctgga cgctggcagc agtgacagca gcagccgcca gcaccgtcct 150

 ggccacggcc ctctctccag cccctacgac catggacttt actccagctc 200

 cactggagga cacctcctca cgcccccaat tctgcaagtg gccatgtgag 250

 tgcccgccat ccccaccccg ctgcccgctg ggggtcagcc tcatcacaga 300

 tggctgtgag tgctgtaaga tgtgcgctca gcagcttggg gacaactgca 350

 cggaggctgc catctgtgac ccccaccggg gcctctactg tgactacagc 400

 ggggaccgcc cgaggtacgc aataggagtg tgtgcacagg tggtcggtgt 450
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gggctgcgtc ctggatgggg tgcgctacaa caacggccag tccttccagc 500

ctaactgcaa gtacaactgc acgtgcatcg acggcgcggt gggctgcaca 550

ccactgtgcc tccgagtgcg ccccccgcgt ctctggtgcc cccacccgcg 600

gcgcgtgagc atacctggcc actgctgtga gcagtgggta tgtgaggacg 650

acgccaagag gccacgcaag accgcacccc gtgacacagg agccttcgat 700

gctgtgggtg aggtggaggc atggcacagg aactgcatag cctacacaag 750

cccctggagc ccttgctcca ccagctgcgg cctgggggtc tccactcgga 800

tctccaatgt taacgcccag tgctggcctg agcaagagag ccgcctctgc 850

aacttgcggc catgcgatgt ggacatccat acactcatta aggcagggaa 900

gaagtgtctg gctgtgtacc agccagaggc atccatgaac ttcacacttg 950

cgggctgcat cagcacacgc tcctatcaac ccaagtactg tggagtttgc 1000

atggacaata ggtgctgcat cccctacaag tctaagacta tcgacgtgtc 1050

cttccagtgt cctgatgggc ttggcttctc ccgccaggtc ctatggatta 1100

atgcctgctt ctgtaacctg agctgtagga tcccaatga catctttgct 1150

gacttggaat cctaccctga cttctcagaa attgccaact aggcaggcac 1200

aaatcttggg tcttggggac taacccaatg cctgtgaagc agtcagccct 1250

tatggccaat aactttcac caatgagcct tagttaccct gatctggacc 1300

cttggcctcc atttctgtct ctaaccattc aaatgacgcc tgatggtgct 1350

gctcaggccc atgctatgag ttttctcctt gatatcattc agcatctact 1400

ctaaagaaaa atgcctgtct ctagctgttc tggactacac ccaagcctga 1450

tccagccttt ccaagtcact agaagtcctg ctggatcttg cctaaatccc 1500

aagaaatgga atcaggtaga cttttaatat cactaatttc ttctttagat 1550

gccaaaccac aagactcttt gggtccattc agatgaatag atggaatttg 1600

gaacaataga ataatctatt atttggagcc tgccaagagg tactgtaatg 1650

ggtaattctg acgtcagcgc accaaaacta tcctgattcc aaatatgtat 1700

gcacctcaag gtcatcaaac atttgccaag tgagttgaat agttgcttaa 1750

ttttgatttt taatggaaag ttgtatccat taacctgggc attgttgagg 1800

ttaagtttct cttcacccct acactgtgaa gggtacagat taggtttgtc 1850

ccagtcagaa ataaaatttg ataaacattc ctgttgatgg gaaaagcccc 1900

cagttaatac tccagagaca gggaaaggtc agcccatttc agaaggacca 1950

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ggccaggctc ttccttgaat cttctccctt gtcctgcttg ggttcatagg 2050
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3

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tggaacactc ctctactctt acagagcctt gagagaccca gctgcagacc 2150

atgccagacc cactgaaatg accaagacag gttcaggtag gggtgtgggt 2200

caaaccaaga agtgggtgcc cttggtagca gcctggggtg acctctagag 2250

ctggaggctg tgggactcca ggggcccccg tgttcaggac acatctattg 2300

cagagactca tttcacagcc tttcgttctg ctgaccaaat ggccagtttt 2350

ctggtaggaa gatggaggtt taccagttgt ttagaaacag aaatagactt 2400

aataaaggtt taaagctgaa gaggttgaag ctaaaggaa aaggttgttg 2450

ttaatgaata tcaggctatt atttattgta ttaggaaaat ataatattta 2500

ctgttagaat tcttttattt agggcctttt ctgtgccaga cattgctctc 2550

agtgctttgc atgtattagc tcactgaatc ttcacgacaa tgttgagaag 2600

ttcccattat tatttctgtt cttacaaatg tgaaacggaa gctcatagag 2650

gtgagaaac tcaaccagag tcacccagtt ggtgactggg aaagttagga 2700

ttcagatcga aattggactg tctttataac ccatattttc cccctgtttt 2750

tagagcttcc aaatgtgtca gaataggaaa acattgcaat aaatggcttg 2800

attttttaaa aaaaaaaaa aaaaaaaaa 2830
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<210> 3
<211> 440
<212> DNA
<213> Homo sapiens

<400> 3
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agcagccgcc agcaccgtcc tggccacggc cctctctcca gcccctacga 100

ccatggactt tactccagct ccactggagg acacctcctc acgcccccaa 150

ttctgcaagt ggccatgtga gtgcccgcca tccccacccc gctgcccgct 200

gggggtcagc ctcatcacag atggctgtga gtgctgtaag atgtgcgctc 250

agcagcttgg ggacaactgc acggaggctg ccatctgtga cccccaccgg 300

ggcctctact gtgactacag cggggaccgc ccgaggtacg caataggagt 350

gtgtgcacag gcggccgcac accaccatca ccatcaccat cactaagtga 400

ggccgcatag ataactgatc cagtgtgctg gaattaattc 440
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<210> 4
<211> 340
<212> DNA
<213> Homo sapiens

<400> 4
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agcagccgcc agcaccgtcc tggccactgc agtggtcggt gtgggctgcg 100

tcctggatgg ggtgcgctac aacaacggcc agtccttcca gcctaactgc 150

aagtacaact gcacgtgcat cgacggcgcg gtgggctgca caccactgtg 200

cctccgagtg cgccccccgc gtctctggtg cccccacccg cggcgcgtga 250

gcatacctgg ccactgctgt gagcagtggg tatgtgcggc cgcacaccac 300

catcaccatc accatcacta agtgaggccg catagataac 340

<210> 5
<211> 321
<212> DNA
<213> Homo sapiens

<400> 5
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 agcagccgcc agcaccgtcc tggccactgc agcatggcac aggaactgca 100

 tagcctacac aagcccctgg agcccttgct ccaccagctg cggcctgggg 150

 gtctccactc ggatctccaa tgttaacgcc cagtgctggc ctgagcaaga 200

 gagccgcctc tgcaacttgc ggccatgcga tgtggacatc catacactca 250

 ttaaggcggc cgcacaccac catcaccatc accatcacta agtgaggccg 300

 catagataac tgatccagtg t 321

<210> 6
<211> 442
<212> DNA
<213> Homo sapiens

<400> 6
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 agcagccgcc agcaccgtcc tggccactgc agggaagaag tgtctggctg 100

 tgtaccagcc agaggcatcc atgaacttca cacttgcggg ctgcatcagc 150

 acacgctcct atcaacccaa gtactgtgga gtttgcatgg acaataggtg 200

 ctgcatcccc tacaagtcta agactatcga cgtgtccttc cagtgtcctg 250

 atgggcttgg cttctcccgc caggtcctat ggattaatgc ctgcttctgt 300

 aacctgagct gtaggaatcc caatgacatc tttgctgact ggaatccta 350

 ccctgacttc tcagaaattg ccaacgcggc cgcacaccac catcaccatc 400

 accatcacta agtgaggccg catagataac tgatccagtg tg 442

<210> 7
<211> 619
<212> DNA
<213> Homo sapiens

<400> 7
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5

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ccatggactt tactccagct ccactggagg acacctcctc acgcccccaa 150

ttctgcaagt ggccatgtga gtgcccgcca tccccacccc gctgcccgct 200

gggggtcagc ctcatcacag atggctgtga gtgctgtaag atgtgcgctc 250

agcagcttgg ggacaactgc acggaggctg ccatctgtga cccccaccgg 300

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acaacggcca gtccttccag cctaactgca agtacaactg cacgtgcatc 450

gacggcgcgg tgggctgcac accactgtgc ctccgagtgc gccccccgcg 500

tctctggtgc ccccacccgc ggcgcgtgag catacctggc cactgctgtg 550

agcagtgggt atgtgcggcc gcacaccacc atcaccatca ccatcactaa 600

gtgaggccgc atagataac 619
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<211> 885
<212> DNA
<213> Homo sapiens

<400> 8
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ccatggactt tactccagct ccactggagg acacctcctc acgcccccaa 150

ttctgcaagt ggccatgtga gtgcccgcca tccccacccc gctgcccgct 200

gggggtcagc ctcatcacag atggctgtga gtgctgtaag atgtgcgctc 250

agcagcttgg ggacaactgc acggaggctg ccatctgtga cccccaccgg 300

ggcctctact gtgactacag cggggaccgc ccgaggtacg caataggagt 350

gtgtgcacag gtggtcggtg tgggctgcgt cctggatggg gtgcgctaca 400

acaacggcca gtccttccag cctaactgca agtacaactg cacgtgcatc 450

gacggcgcgg tgggctgcac accactgtgc ctccgagtgc gccccccgcg 500

tctctggtgc ccccacccgc ggcgcgtgag catacctggc cactgctgtg 550

agcagtgggt atgtgaggac gacgccaaga ggccacgcaa gaccgcaccc 600

cgtgacacag gagccttcga tgctgtgggt gaggtggagg catggcacag 650

gaactgcata gcctacacaa gccctggag cccttgctcc accagctgcg 700

gcctgggggt ctccactcgg atctccaatg ttaacgccca gtgctggcct 750

gagcaagaga gccgcctctg caacttgcgg ccatgcgatg tggacatcca 800

tacactcatt aaggcggccg cacaccacca tcaccatcac catcactaag 850
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<210> 9
<211> 1014
<212> DNA
<213> Homo sapiens

<400> 9

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ccatggactt tactccagct ccactggagg acacctcctc acgcccccaa 150

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agcagtgggt atgtctgcag gcagggaaga agtgtctggc tgtgtaccag 600

ccagaggcat ccatgaactt cacacttgcg ggctgcatca gcacacgctc 650

ctatcaaccc aagtactgtg gagtttgcat ggacaatagg tgctgcatcc 700

cctacaagtc taagactatc gacgtgtcct tccagtgtcc tgatgggctt 750

ggcttctccc gccaggtcct atggattaat gcctgcttct gtaacctgag 800

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tctcagaaat tgccaacgcg gccgcacacc accatcacca tcaccatcac 900

taagtgaggc cgcatagata actgatccag tgtgctggaa ttaattcgct 950

gtctgcgagg gccagctgtt ggggtgagta ctccctctca aaagcgggca 1000

tgacttctgc gcta 1014
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<210> 10
<211> 904
<212> DNA
<213> Homo sapiens

<400> 10

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agcagccgcc agcaccgtcc tggccacggc cctctctcca gcccctacga 100

ccatggactt tactccagct ccactggagg acacctcctc acgcccccaa 150

ttctgcaagt ggccatgtga gtgcccgcca tccccacccc gctgcccgct 200
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ggggggtcagc ctcatcacag atggctgtga gtgctgtaag atgtgcgctc 250

agcagcttgg ggacaactgc acggaggctg ccatctgtga cccccaccgg 300

ggcctctact gtgactacag cggggaccgc ccgaggtacg caataggagt 350

gtgtgcgcat gctgtgggtg aggtggaggc atggcacagg aactgcatag 400

cctacacaag cccctggagc ccttgctcca ccagctgcgg cctgggggtc 450

tccactcgga tctccaatgt taacgcccag tgctggcctg agcaagagag 500

ccgcctctgc aacttgcggc catgcgatgt ggacatccat acactcatta 550

aggcagggaa gaagtgtctg gctgtgtacc agccagaggc atccatgaac 600

ttcacacttg cgggctgcat cagcacacgc tcctatcaac ccaagtactg 650

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tcgacgtgtc cttccagtgt cctgatgggc ttggcttctc ccgccaggtc 750

ctatggatta atgcctgctt ctgtaacctg agctgtagga atcccaatga 800

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cggccgcaca ccaccatcac catcaccatc actaagtgag gccgcataga 900

taac 904

<210> 11
<211> 922
<212> DNA
<213> Homo sapiens

<400> 11
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tcctggatgg ggtgcgctac aacaacggcc agtccttcca gcctaactgc 150

aagtacaact gcacgtgcat cgacggcgcg gtgggctgca caccactgtg 200

cctccgagtg cgccccccgc gtctctggtg cccccacccg cggcgcgtga 250

gcatacctgg ccactgctgt gagcagtggg tatgtgagga cgacgccaag 300

aggccacgca agaccgcacc ccgtgacaca ggagccttcg atgctgtggg 350

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gcccttgctc caccagctgc ggcctggggg tctccactcg gatctccaat 450

gttaacgccc agtgctggcc tgagcaagag agccgcctct gcaacttgcg 500

gccatgcgat gtggacatcc atacactcat taaggcaggg aagaagtgtc 550

tggctgtgta ccagccagag gcatccatga acttcacact tgcgggctgc 600

atcagcacac gctcctatca acccaagtac tgtggagttt gcatggacaa 650

taggtgctgc atcccctaca agtctaagac tatcgacgtg tccttccagt 700

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gtcctgatgg gcttggcttc tcccgccagg tcctatggat taatgcctgc 750

ttctgtaacc tgagctgtag gaatcccaat gacatctttg ctgacttgga 800

atcctaccct gacttctcag aaattgccaa cgcggccgca caccaccatc 850

accatcacca tcactaagtg aggccgcata gataactgat ccagtgtgct 900

ggaattaatt cgctgtctgc ga 922
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<210> 12
<211> 19
<212> DNA
<213> Mus musculus

<400> 12
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ggctgccatc tgtgaccca 19
```

<210> 13
<211> 21
<212> DNA
<213> Mus musculus

<400> 13
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cataggacct gccgggagaa a 21
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<210> 14
<211> 19
<212> DNA
<213> Mus musculus

<400> 14
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gccgtggcag tcctgaggg 19
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<210> 15
<211> 21
<212> DNA
<213> Mus musculus

<400> 15
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cagcaccggg cattgacgtt a 21
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<210> 16
<211> 21
<212> DNA
<213> Mus musculus

<400> 16
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tggagaaaaa tggccgctac a 21
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<210> 17
<211> 20
<212> DNA
<213> Mus musculus

<400> 17
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tggggtgctc ttctcgatgg 20
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<210> 18
<211> 21
<212> DNA
<213> Mus musculus

<400> 18
 ggacaaatcg gccacgtaca t 21

<210> 19
<211> 19
<212> DNA
<213> Mus musculus

<400> 19
 cttgctccat cgggtctgc 19

<210> 20
<211> 42
<212> PRT
<213> Homo sapiens

<400> 20
 Glu Gln Trp Val Cys Glu Asp Asp Ala Lys Arg Pro Arg Lys Thr
  1   5   10   15

 Ala Pro Arg Asp Thr Gly Ala Phe Asp Ala Val Gly Glu Val Glu
                 20   25   30

 Ala Trp His Arg Asn Cys Ile Ala Tyr Thr Ser Pro
                 35   40